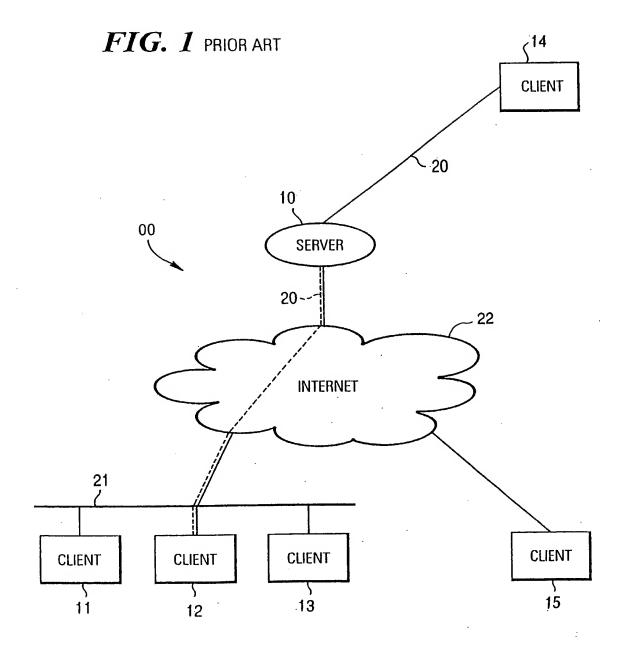
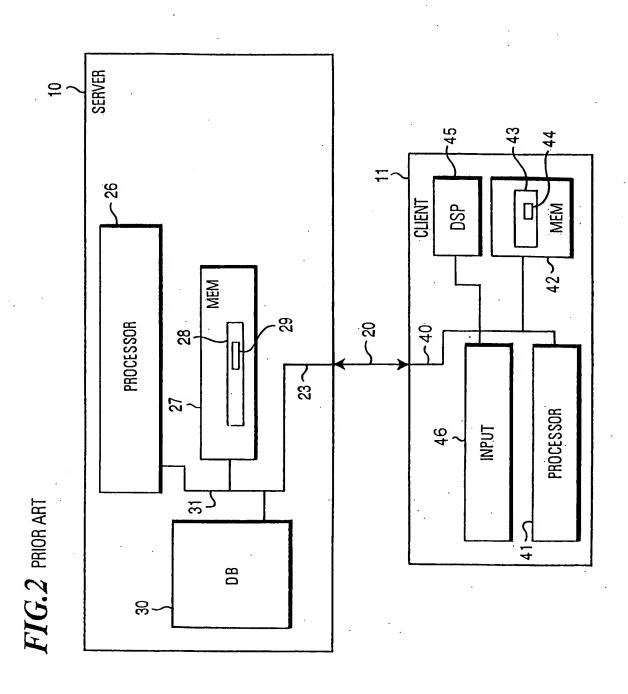
Inventors: Thorsten O. Laux, et al.
Title: Method and Apparatus for Providing...
U.S. Appl. No.: 10/025,497
Fil. Date: 12/26/01 Grp. Art Unit: 2154
Sheet 1 of 23

Atty. Docket No.: 30014200.1020

1/23



Inventors: Thorsten O. Laux, et al.
Title: Method and Apparatus for Providing...
U.S. Appl. No.: 10/025,497
Fil. Date: 12/26/01 Grp. Art Unit: 2154
Sheet 2 of 23
Atty. Docket No.: 30014200.1020



Title: Method and Apparatus for Providing...

U.S. Appl. No.: 10/025,497

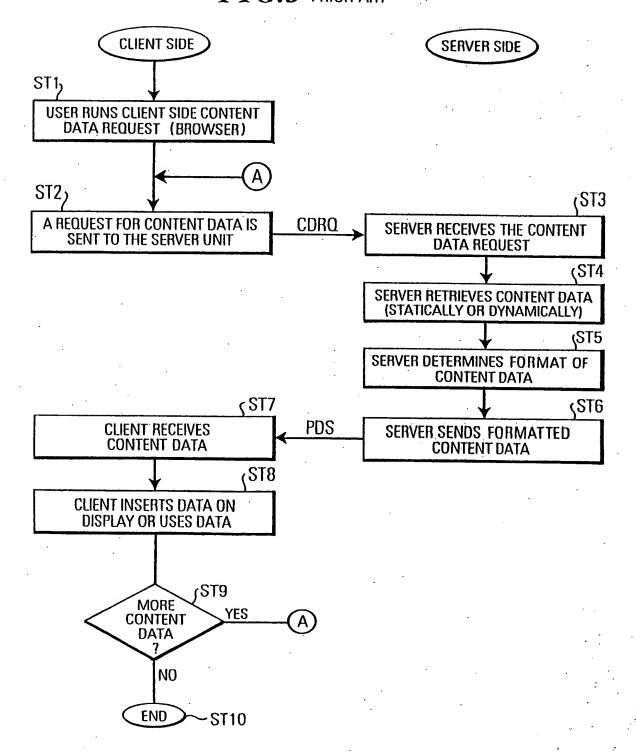
Fil. Date: 12/26/01 Grp. Art Unit: 2154

Sheet 3 of 23

Atty. Docket No.: 30014200.1020

3/23

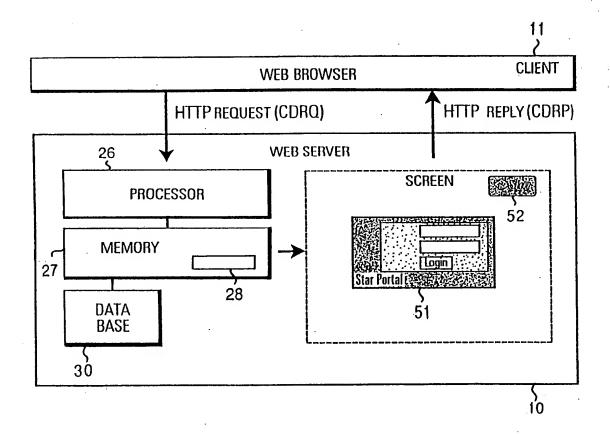
FIG.3 PRIOR ART



Inventors: Thorsten O. Laux, et al.
Title: Method and Apparatus for Providing...
U.S. Appl. No.: 10/025,497
Fil. Date: 12/26/01 Grp. Art Unit: 2154
Sheet 4 of 23

Atty. Docket No.: 30014200.1020

FIG.4 PRIOR ART



Inventors: Thorsten O. Laux, et al.
Title: Method and Apparatus for Providing...
U.S. Appl. No.: 10/025,497
Fil. Date: 12/26/01 Grp. Art Unit: 2154
Sheet 5 of 23

Atty. Docket No.: 30014200.1020

5/23

FIG.5a

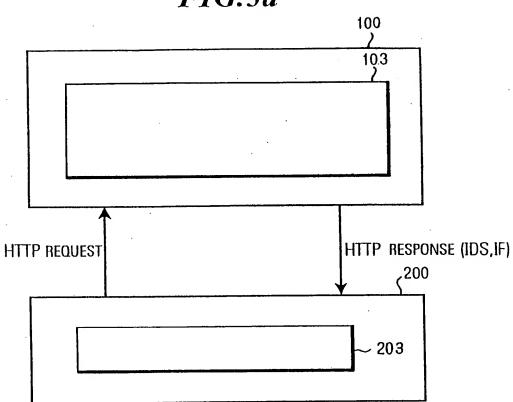
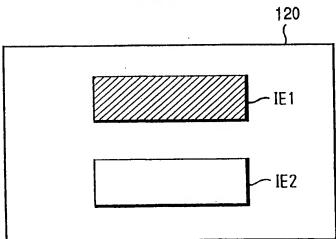
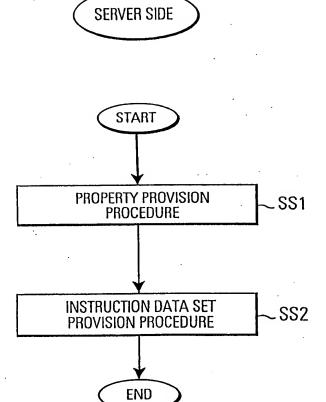


FIG.5c



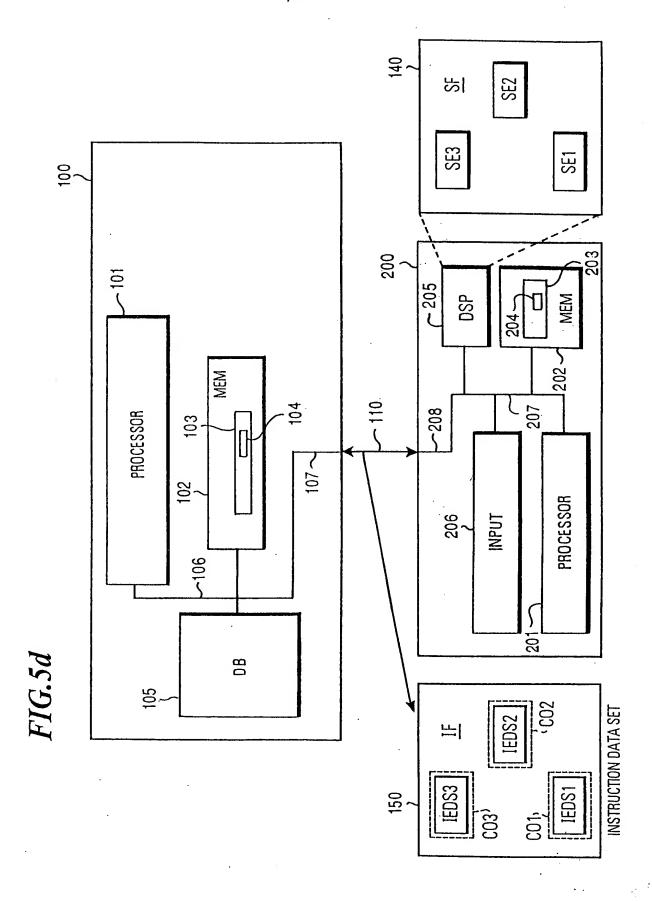
Inventors: Thorsten O. Laux, et al.
Title: Method and Apparatus for Providing...
U.S. Appl. No.: 10/025,497
Fil. Date: 12/26/01 Grp. Art Unit: 2154
Sheet 6 of 23
Atty. Docket No.: 30014200.1020

FIG.5b

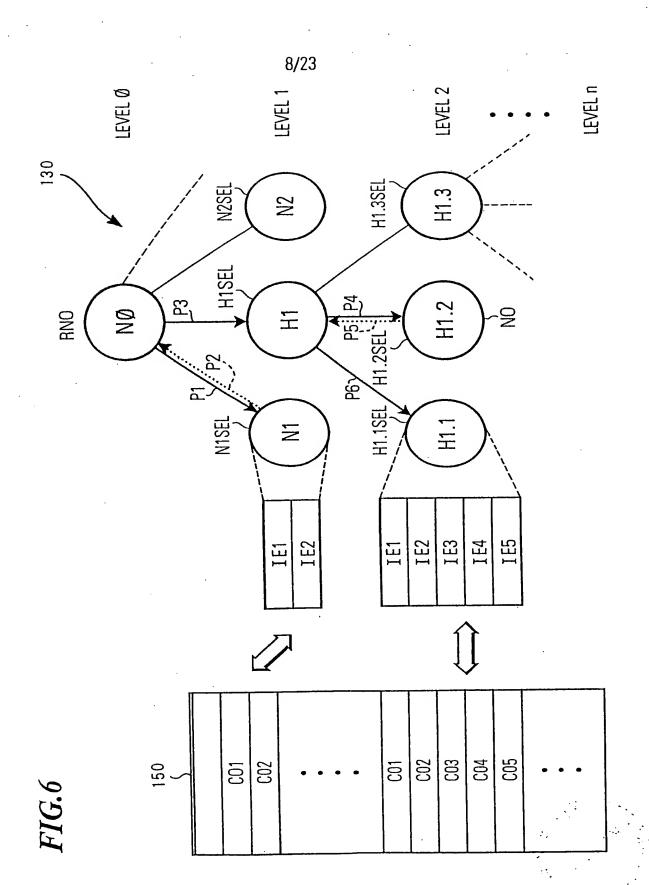


Inventors: Thorsten O. Laux, et al.
Title: Method and Apparatus for Providing...
U.S. Appl. No.: 10/025,497
Fil. Date: 12/26/01 Grp. Art Unit: 2154
Sheet 7 of 23
Atty. Docket No.: 30014200.1020

7/23



Inventors: Thorsten O. Laux, et al.
Title: Method and Apparatus for Providing...
U.S. Appl. No.: 10/025,497
Fil. Date: 12/26/01 Grp. Art Unit: 2154
Sheet 8 of 23
Atty. Docket No.: 30014200.1020



Title: Method and Apparatus for Providing...

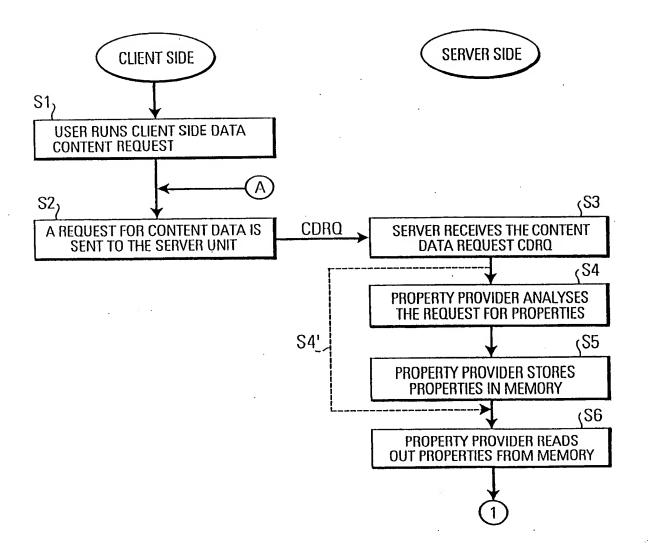
U.S. Appl. No.: 10/025,497

Fil. Date: 12/26/01 Grp. Art Unit: 2154

Sheet 9 of 23

Atty. Docket No.: 30014200.1020

FIG.7a



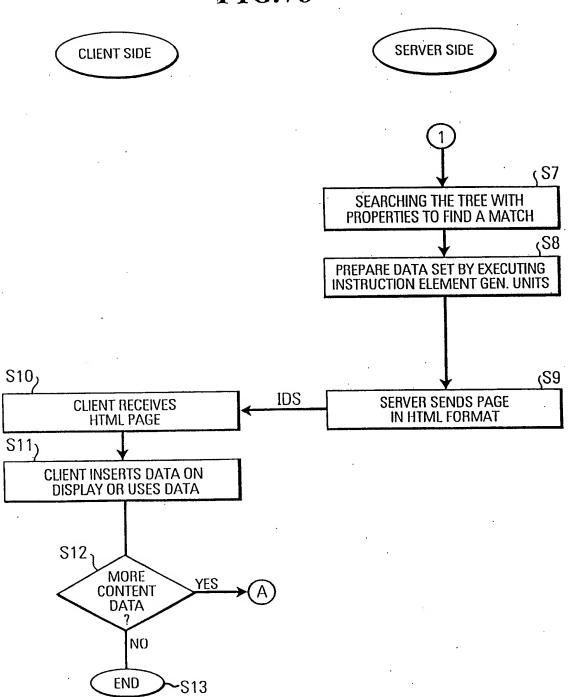
Inventors: Thorsten O. Laux, et al. Title: Method and Apparatus for Providing... U.S. Appl. No.: 10/025,497

Fil. Date: 12/26/01 Grp. Art Unit: 2154

Sheet 10 of 23

Atty. Docket No.: 30014200.1020

FIG.7b



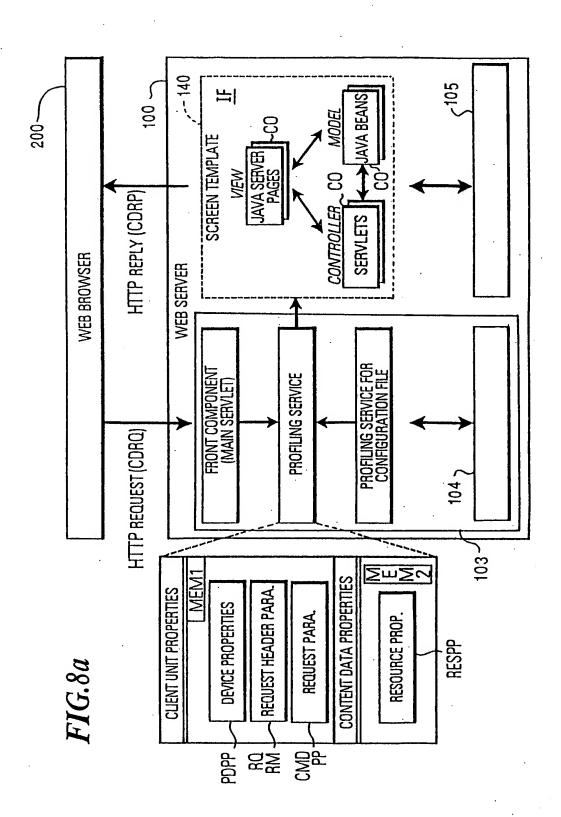
Title: Method and Apparatus for Providing...

U.S. Appl. No.: 10/025,497 Fil. Date: 12/26/01 Grp. Art Unit: 2154

Sheet 11 of 23

Atty. Docket No.: 30014200.1020

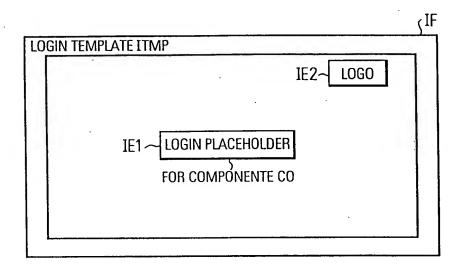
11/23

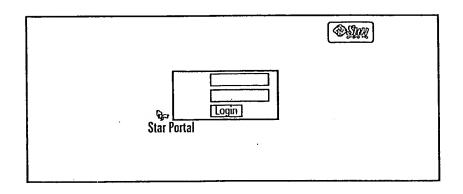


Inventors: Thorsten O. Laux, et al.
Title: Method and Apparatus for Providing...
U.S. Appl. No.: 10/025,497
Fil. Date: 12/26/01 Grp. Art Unit: 2154
Sheet 12 of 23
Atty. Docket No.: 30014200.1020

12/23

FIG.8b





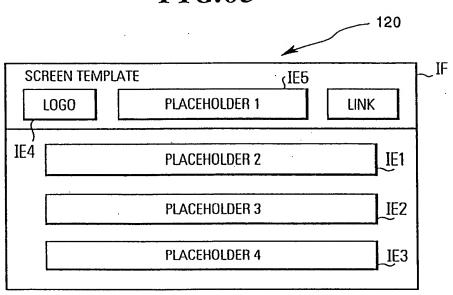
Inventors: Thorsten O. Laux, et al. Title: Method and Apparatus for Providing...

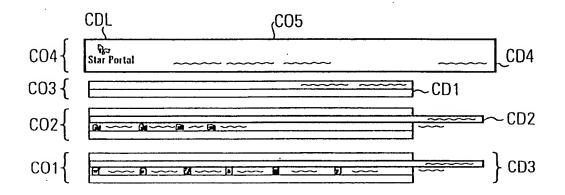
U.S. Appl. No.: 10/025,497 Fil. Date: 12/26/01 Grp. Art Unit: 2154

Sheet 13 of 23

Atty. Docket No.: 30014200.1020

FIG.8c





Title: Method and Apparatus for Providing...

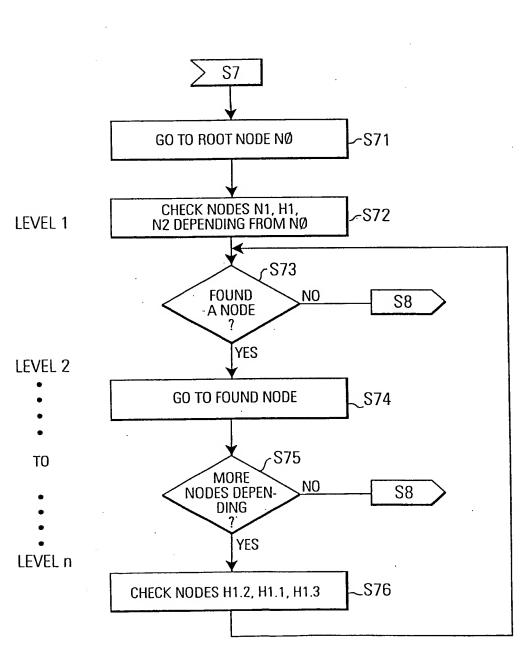
U.S. Appl. No.: 10/025,497 Fil. Date: 12/26/01 Grp. Art Unit: 2154

Sheet 14 of 23

Atty. Docket No.: 30014200.1020

FIG.9





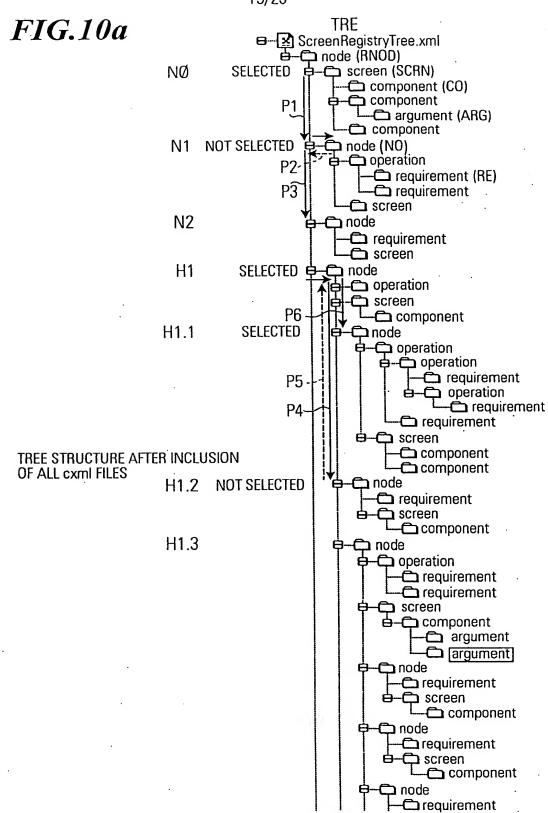
Inventors: Thorsten O. Laux, et al. Title: Method and Apparatus for Providing...

U.S. Appl. No.: 10/025,497

Fil. Date: 12/26/01 Grp. Art Unit: 2154

Sheet 15 of 23

Atty. Docket No.: 30014200.1020



Inventors: Thorsten O. Laux, et al.

Title: Method and Apparatus for Providing...

U.S. Appl. No.: 10/025,497

Fil. Date: 12/26/01 Grp. Art Unit: 2154

Sheet 16 of 23

Atty. Docket No.: 30014200.1020

16/23

FIG.10b

xml file for main nodes

MAIN

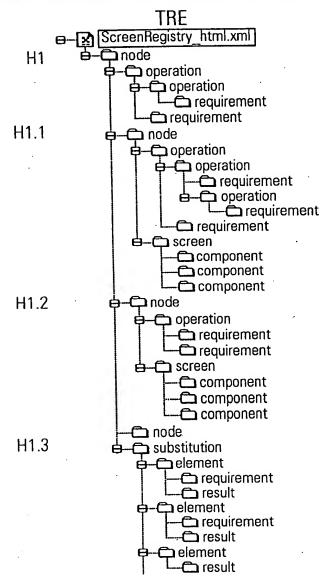
```
<?xml version="1.0" encoding= "ISO-8859-1"? >
<! -- sreen definitions -->
- <node>
    <!-- default screen -->
  - < screen template="/html/HTMLTemplate,jsp " class=" default >
     <component name = "Title" value = "www.mydomain.com" direct = "true"/>
- <component name = "Background" value = "/html/HTMLBackground.jsp"/>
         <argument name="picture" value="$BACKGROUND PICTURE"/>
       </component>
       <component name= "Error" value="/html/HTMLError.jsp"/>
     </screen>
     <!-- execute login -->
                                                           RETYP
     <node>
     -<operation type= "and">
          <requirement type= "requestParameter" name="cmd"
            value = "execute_login"/>
 N1
          <requirement type= "executionEnvironment" name="loginBean"
            value="null"/>
       </operation>
       <screen template="/portal/login" class= "login"/>
     </node>
    <!-- logout -->
    <node>
         <requirement type="requestParameter" name="cmd" value="logout"/>
         <screen template = "/portal/logout" class = "logout"/>
 N2 </node>
      <!-- include screen definition files for different devices supported
      <include file = "etc/screenregistries/portal/ScreenRegistry_wml.xml" /> <include file = "etc/screenregistries/portal/ScreenRegistry_pqa.xml" /> <include file = "etc/screenregistries/portal/ScreenRegistry_xul.xml" /> <include file = "etc/screenregistries/portal/ScreenRegistry_html.xml"/>
    </node>
```

Inventors: Thorsten O. Laux, et al.
Title: Method and Apparatus for Providing...
U.S. Appl. No.: 10/025,497
Fil. Date: 12/26/01 Grp. Art Unit: 2154
Sheet 17 of 23
Atty. Docket No.: 30014200.1020

17/23

FIG.10c

TREE VIEW FOR SOME HTML NODES OF THE SCREEN REGISTRY



Inventors: Thorsten O. Laux, et al.
Title: Method and Apparatus for Providing...
U.S. Appl. No.: 10/025,497
Fil. Date: 12/26/01 Grp. Art Unit: 2154
Sheet 18 of 23
Atty. Docket No.: 30014200,1020

18/23

FIG.10dxml file of HTML nodes HTML <?xml version = "1.0" encoding = "ISO-8859-1"?> <!-- Screen definitions for standard HTML devices (MSIE, Netscape, ...) . <node> <operation type="or"> <operation type="not"> <requirement type="ccpp" name="Browser.CCPPAccept.text/html" value="null"/> H₁ </operation> <requirement type = "requestHeaderParameter" name = "user-agent"</pre> value="Mozilla*"/> </operation> <!-- login page --> <node> H1.1 <operation type="or"> <operation type = "and"> <requirement type="executionEnvironment" name="loginBean"</pre> value="null"/> <operation type="not" > <requirement type="requestParameter" name="cmd"</pre> value = "execute login"/> </operation> </operation> <requirement type="requestParameter" name= "page" value="login"/> </operation> <screen ID ="Login.Screen" template = "/html/HTMLLoginTemplate.jsp" class = "default" > """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ | """ <component name="Title" value="HTMLLogin.title" direct="true"</pre> base = "com.sun.star.portal.web.jsp.html"/> <component name="CurrentContent" value="/html/HTMLLogin.jsp"/> <component name="Error" value= "/html/HTMLError.jsp"/> </screen> </node> <!-- welcome page --> H1.2 - <node> - <operation type="or"> <requirement type=="executionEnvironment" name=="UniversalContentBrockerContent" value== "null"/> <requirement type="resourceProperty" name="PresentationURL"</p> value = "staroffice.private:factory/desktop" /> </operation> <screen ID= "Welcome.Screen" class = "default" > <component name = "Title" value = "HTMLWelcome.title" direct = "true"</pre> base = "com.sun.star.portal.web.jsp.html"/> <component name = "Shortcuts" value = "/html/HTMLShortcuts.jsp"/> <component name = "CurrentContent" value="/html/HTMLWelcome.jsp"/> </screen> </node> H1.3: - < node > <!-- more HTML nodes ... --> </node> <substitution name="\$BACKGROUND PICTURE" > <element> <requirement type = "userInformation" name="gender" value="f"/> <result value="HTMLWomensBackground.gif"/>

file: //V:\pat\ScreenRegistry html.xml

Title: Method and Apparatus for Providing...

U.S. Appl. No.: 10/025,497

Fil. Date: 12/26/01 Grp. Art Unit: 2154

Sheet 19 of 23

Atty. Docket No.: 30014200.1020

19/23

FIG.10e

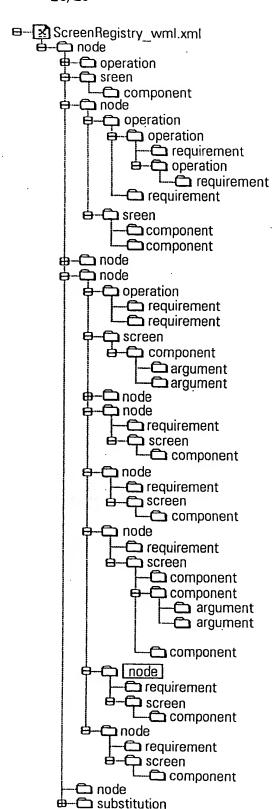
Inventors: Thorsten O. Laux, et al.
Title: Method and Apparatus for Providing...
U.S. Appl. No.: 10/025,497
Fil. Date: 12/26/01 Grp. Art Unit: 2154

Sheet 20 of 23 Atty. Docket No.: 30014200.1020

20/23

FIG.10f

WML NODES



Title: Method and Apparatus for Providing...

U.S. Appl. No.: 10/025,497

Fil. Date: 12/26/01 Grp. Art Unit: 2154

Sheet 21 of 23

Atty. Docket No.: 30014200.1020

21/23

WML

xml FILE OF WML NODES

FIG.10g

```
<?xml version="1.0" encoding= "ISO-8859-1"?>
<!-- Screen definitions for WAP (WML) devices -->
<node>
 < operation type = "or" >
    <operation type = "not" >
      <requirement type="ccpp"
       name="Browser.CCPPAccept.text/vnd.wap.wml" value="null">
    </operation>
    <requirement type = "requestHeaderParameter" name = "user-agent"
value = "Wapalizer*"/>
<requirement type = "requestHeaderParameter" name = "user-agent"</pre>
    value="Nokia*"/>
<requirement type= "requestHeaderParameter" name="user-agent"
      value = "R380*"/>
    <requirement type = "requestHeaderParameter" name = "user-agent"</pre>
      value = "ERKO UP/4.0.10*"/>
    <requirement type= "requestHeaderParameter" name= "user-agent"
      value = "ALAV UP/4.0.10*"/>
     <requirement type= "requestHeaderParameter" name="user-agent"</pre>
       value = "SPO1 UP/4.0.10*"/>
     <requirement type= "requestHeaderParameter" name="user-agent"
value="T250 UP/4.0.10*"/>
    <requirement type= "requestHeaderParameter" name= "user-agent" value= "IM1K UP/4.0.10*"/>
     <requirement type= "requestHeaderParameter" name="user-agent"
       value = "MOT-CB/0.0.18 UP/4.0.10*"/>
     <requirement type= "requestHeaderParameter" name="user-agent"</pre>
       value = "SH UP/4.0.10*"/>
   </operation>
   <screen template="/wml/WMLTemplate.jsp" class="wml">
    <component name="Error"value="/wml/WMLError.jsp"/>
   </screen>
   <!-- login page -->
   <node>
      <operation type="or">
        <operation type= "and">
          <requirement type="executionEnvironment" name="loginBean"
            value = "null"/>
       - < operation type = "not" >
            <requirement type="requestParameter" name= "cmd"</pre>
              value = "execute login"/>
          </operation>
        </operation>
         <requirement type="requestParameter" name= "page" value= "login"/>
       </operation>
      </screen>
     </node>
     <!-- welcome page -->
        <requirement type = "executionEnvironment"
         name = "UniversalContentBrockerContent" value = "null"/>
       <screen class="wml">
         <componente name="Deck 1" value= "wml/WMLWelcome.jsp"/>
```

Title: Method and Apparatus for Providing... U.S. Appl. No.: 10/025,497

Fil. Date: 12/26/01 Grp. Art Unit: 2154

Sheet 22 of 23

Atty. Docket No.: 30014200.1020

22/23 FIG.10h

WML </screen > </node> <!-- module explorer --> <node> - < operation type = "or" > <requirement type="resourceProperty"name="protocol" value="file:"/ <requirement type = "resourceProperty" name = "protocol"</pre> value = "ftp:"/> </operation> <screen class="wml"> - <component name="Deck_1" value="\$WMLEXPLORER" > <argument name = "explorertype" value = "explorer"/>
<argument name = "title" value = "WMLExplorer".documents"/> </component > </screen> <node> <requirement type="requestParameter" name "cmd" value="viewPage"/> <screen class="wml"> <component name="Action" value="/portal/viewpage"/> - </screen> </node> - <node> <requirement type="requestParameter" name="cmd" value = "rename"/> <screen class="wml"> <component name = "Deck_1" value = "WMLRename.jsp"/> </screen> </node> - <node> <requirement type="requestParameter" name = "cmd" value = "delete"/> - </screen class="wml"> <component name = "Action" value = "/portal/delete"/> </screen> </node> <node> < requirement type= "requestParameter" name="cmd"</pre> value="execute mail"/> </component> <component name = "Error" value="/wml/WMLMailSendError.jsp"/> </screen> </node> <node> <requirement type="requestParameter" name="cmd"</pre> value="execute new folder"/> <screen class="wml"> <component name = "Action" value = "/portal/newFolder" /> </screen> </node> <node> file: //V:\pat\ScreenRegistry wml.xml

Title: Method and Apparatus for Providing...

U.S. Appl. No.: 10/025,497

Fil. Date: 12/26/01 Grp. Art Unit: 2154

Sheet 23 of 23

Atty. Docket No.: 30014200.1020

23/23

FIG.10i

WML

```
<requirement type="requestParameter" name="submodule"/>
        value="menu"/>
  - <screen template="/wml/WMLTemplate.jsp" class= "contextmenu"> <component name= "Deck_1" value="/wml/WMLCommands.jsp"/>
     </screen>
   </node>
<node>
<node>
    <!-- more WML nodes ... -->
 </node>
<substitution name = "$WMLEXPLORER" >
 - <element>
       <requirement type= "requestParameter" name= "viewTypeExplorer"
  value="fileview"/>
  <result value= "/wml/WMLFileView.jsp"/>
    </element>
 - <element>
     <result value="/wml/WMLFolderView.jsp" />
    </element>
  </substitution>
</node>
<!-- End WAP (WML) description -->
```

file: //V:\pat\ScreenRegistry_wml.xml